

WHAT IS CLAIMED IS:

1. A deposited-film formation apparatus for forming a deposited film on a substrate by;

generating plasma in a discharge space defined
5 between a power-applying electrode and the substrate in a vacuum chamber, the substrate being servable as an electrode disposed opposingly to the power-applying electrode; and

decomposing a material gas fed into the vacuum
10 chamber, wherein;

the substrate has a flexibility, and the power-applying electrode is provided with an undulation on its surface on the side of discharge space in such a way that the distance between the substrate and the
15 power-applying electrode comes to be a desired value in agreement with the curving of the substrate.

2. The deposited-film formation apparatus according to claim 1, wherein the undulation is formed
20 in agreement with the curving of the substrate in the course of its transportation.

3. A deposited-film formation apparatus for forming a deposited film on a substrate by;

25 generating plasma in a discharge space defined between a power-applying electrode and the substrate in a vacuum chamber, the substrate being servable as an

electrode disposed opposingly to the power-applying electrode; and

decomposing a material gas fed into the vacuum chamber, wherein;

5 the power-applying electrode has a structure comprising a plurality of sheets or a plurality of columnar members which are bundled upright with respect to the substrate.

10 4. The deposited-film formation apparatus according to claim 3, wherein the substrate has a flexibility, and the power-applying electrode is an electrode which is pressed against the surface of the substrate in such a way that individual sheets or
15 individual columnar members constituting the power-applying electrode come into contact with that surface at their upper ends so that a curved shape of the substrate is transferred to the surface of the power-applying electrode.

20 5. The deposited-film formation apparatus according to claim 3, wherein a means for pressing the power-applying electrode against the surface of the substrate in such a way that individual sheets or
25 individual columnar members constituting the power-applying electrode come into contact with that surface is further provided at the power-applying

electrode on its side opposite to the substrate side.

6. The deposited-film formation apparatus according to claim 3, which has a mechanism for transporting the substrate and wherein the surface that connects substrate-side ends of the plurality of sheets or plurality of columnar members is so formed as to be in agreement with the curving of the substrate in the course of its transportation.

7. A deposited-film formation process comprising the step of:

generating plasma in a discharge space defined between a power-applying electrode and the substrate in a vacuum chamber, the substrate being servable as an electrode disposed opposingly to the power-applying electrode; and

decomposing a material gas fed into the vacuum chamber, to form a deposited film on the substrate while the substrate is transported,

wherein;

the process further comprises the steps of:

providing the power-applying electrode with an undulation on its surface in agreement with the curving of the substrate in the course of its transportation; and

disposing the power-applying electrode in the

vacuum chamber.

8. A deposited-film formation process comprising the steps of:

5 generating plasma in a discharge space defined between a power-applying electrode and the substrate in a vacuum chamber, the substrate being servable as an electrode disposed opposingly to the power-applying electrode; and

10 decomposing a material gas fed into the vacuum chamber, to form a deposited film on the substrate, wherein;

 the inside of the vacuum chamber is brought into conditions for forming the deposited film, and the
15 deposited film is formed by generating the plasma after the power-applying electrode, constituted of a plurality of sheets or a plurality of columnar members which are bundled upright with respect to the substrate, is so pressed against the substrate as to
20 come into contact with its surface to transfer a curved shape of the substrate to the surface of the power-applying electrode and then the power-applying electrode is separated from the surface of the substrate.

25